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P.O. Box 1927
Spartanburg, SC 29304

EXAMINER

GRENDZYNSKI, MICHAEL E

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| ART UNIT | PAPER NUMBER |
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1774

DATE MAILED: 04/30/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/044,171

Applicant(s)

CATES ET AL.

Examiner

Michael E. Grendzynski

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 4-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 23-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4 and 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

ok 1. Applicants' election with traverse of Species "A" (claims 1-3 and 23-28) in Paper No. 8 is acknowledged. The traversal is on the ground that "there appears to be no burden in searching and examining the application as presented." This is not found persuasive because, as made of record, the application contains claims directed to patentably distinct species. It appears that applicants are suggesting the species are not patentably distinct. If such is the case, applicants should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

The requirement is still deemed proper and is therefore made FINAL. Claims 4-22 are withdrawn from further consideration, being drawn to a nonelected species.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

OK 3. Claims 1, 2 and 23-28 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-23 of copending Application No. 10/044,414. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant application claims a device comprising (1) a textile substrate and (2) a coating thereon, wherein the coating includes (a) a repellant finish chemical (comprising, e.g., a fluorochemical), (b) a cationic material and (c) a sorbent polymer. The '414 application claims a device comprising (1) a textile substrate and (2) a coating thereon, wherein the coating includes (a) a multiphase fluorochemical comprising a block copolymer with a fluorine having hydrophilic and hydrophobic segments, (b) a cationic material and (c) a sorbent polymer. The multiphase fluorochemical comprising a block copolymer having a fluorine with hydrophilic and hydrophobic segments meets the claim limitation of the instant application, directed generically to a fluorochemical. With regard to claims 23-28, applicants further claim the presence of the repellant finish chemical in specific amounts. Claims 19-20 of the '414 application disclose the presence of its fluorochemical falling within ranges claimed by claims 23-28 of the instant application. In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990). See MPEP § 2144.05. Applicants can rebut a prima facie case of obviousness based on overlapping ranges by showing the

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criticality of the claimed range. *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir.1990); *see also* MPEP § 2144.05.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

4. Claims 1, 2 and 23-28 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5 and 13-23 of copending Application No. 10/040742. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant application claims a device comprising (1) a textile substrate and (2) a coating thereon, wherein the coating includes (a) a repellant finish chemical (comprising, e.g., a fluorochemical), (b) a cationic material and (c) a sorbent polymer. The '742 application claims a device comprising (1) a textile substrate and (2) a coating thereon, wherein the coating includes (a) a repellant finish chemical, (b) a polymeric cationic material having at least two carbon atoms and (c) a sorbent polymer. The polymeric cationic material having at least two carbon atoms meets the claim limitation of the instant application, directed generically to a cationic material. With regard to claims 23-28, applicants further claim the presence of the repellant finish chemical in specific amounts. Claims 24-25 of the '742 application disclose amount ranges of the repellant finish chemical which overlap the amount ranges indicated by claims 23-28 of the instant application. In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990). *See* MPEP § 2144.05. Applicants can rebut a prima facie case of obviousness based on overlapping ranges by showing the criticality of the claimed range. *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir.1990); *see also* MPEP § 2144.05.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

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OK 5. Claims 1, 2 and 23-28 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5 and 13-23 of copending Application No. 10/044166. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant application claims a device comprising (1) a textile substrate and (2) a coating thereon, wherein the coating includes (a) a repellant finish chemical (comprising, e.g., a fluorochemical), (b) a cationic material and (c) a sorbent polymer. The '166 application claims a device comprising (1) a textile substrate and (2) a coating thereon, wherein the coating includes (a) a multiphase fluorochemical, (b) an organic cationic material having at least two carbon atoms and (c) a sorbent polymer. The organic cationic material having at least two carbon atoms meets the claim limitation of the instant application directed generically to a cationic material. The multiphase fluorochemical, moreover, meets the claim limitation of the instant application directed generically to a repellant finish chemical (which comprises a fluorochemical). With regard to claims 23-28, applicants further claim the presence of the repellant finish chemical in specific amounts. Claim 19 of the '166 application discloses the presence of the repellant finish chemical in amount ranges which overlap those indicated in claims 23-28 of the instant application. In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990). See MPEP § 2144.05. Applicants can rebut a prima facie case of obviousness based on overlapping ranges by showing the criticality of the claimed range. *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir.1990); see also MPEP § 2144.05.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

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Claim Objections

Keep 6. Claims 1-3 and 23-28 are objected to because of the following informalities: the phrase "an sorbant" should read "a sorbent." Examiner believes this is an inadvertent typographical error.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Keep 8. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Aoki (EP 693587).
23-28

Applicants claim a device comprising (1) a textile substrate and (2) a coating thereon, wherein the coating includes (a) a repellant finish chemical, (b) a cationic material and (c) a sorbent polymer. Aoki discloses an ink jet printing cloth. See Abstract. The substrate is equivalent to applicants' textile substrate. It comprises a cloth made of fiber materials. See p 3, ll 52-54. The cloth is coated with a composition comprising a water repellant compound (a fluorine compound, see p 3, ll 57-59), a water-soluble polymer comprising a hydrophilic group (see p 4, ll 34-42) and water-soluble inorganic salts (see p 4, ll 55-57). See p 5, ll 1-2 (disclosing the composition is coated on the substrate). The water-repellant is equivalent to applicants' repellant finish chemical. It comprises a fluorine compound. See p 3, ll 57-59. The water-soluble polymer comprising a hydrophilic group is equivalent to applicants' sorbent polymer—it comprises a natural or synthetic polymer that improves the ink absorbing ability of the coating. See p 4, ll 34-42; Cf. specification at p 6, ll 6-17 (explaining the sorbent polymer absorbs ink and comprises a natural or synthetic polymer). The water-soluble inorganic salt is equivalent to applicants' cationic material. It comprises a metal salt such as calcium chloride. See p 4, ll 55-57 and specification at p 6, ll 1-5 (describing the cationic material as including metal salts).

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The limitations of the claims are met by the disclosure of the reference.

23-28

9. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Abe (US 5372884). Abe discloses an ink jet recording sheet comprising a support layer and an ink-receiving layer. See Abstract. The substrate is equivalent to applicants' textile substrate. It comprises fibers. See col. 5, ll 24-29. The ink-receiving layer is equivalent to applicants' coating comprising a repellant finish chemical, a cationic material and a sorbent polymer. It comprises a fluorinated surfactant (see col. 4, ll 4-12), a polymer (see col. 3, ll 21-23) and cationic silica (see col. 2, ll 40-45). The polymer is equivalent to applicants' sorbent polymer. It comprises, e.g., carboxymethyl cellulose or polymethyl methacrylate. See col. 3, l 35 and l 56; see also the specification at p 6, ll 6-17 (disclosing carboxymethyl cellulose and polymethyl methacrylate as preferred sorbent materials). The cationic silica is equivalent to applicants' cationic material. The silica possesses a cationic charge. See specification on p 5, ll 8-15 (defining the cationic material as a material possessing a cationic charge). The fluorine surfactant, moreover, is equivalent to applicants' repellant chemical. See specification at p 3, l 17 (explaining fluorochemicals are a repellant finish chemical). This composition is coated onto the support. See 4, ll 48-54.

The limitations of the claims are met by the disclosure of the reference.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 23-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki, as applied to claims 1-2, above. With regard to claims 23-28, applicants claim that the repellant finish chemical is present in various weight percents (e.g., 0.005 to 60 weight percent). Aoki discloses that its water

Keep

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repellant compound is present in an amount of 0.05 – 40% by weight. See p 4, ll 4-5. Consequently, Aoki discloses that its water repellant compound is present in an amount that overlaps applicants' claimed amounts. In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990). See MPEP § 2144.05. Applicants can rebut a prima facie case of obviousness based on overlapping ranges by showing the criticality of the claimed range. *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990); see also MPEP § 2144.05.

12. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abe (US 5372884), as applied to claims 1-2, above, in view of McDowell (US 3589906). Applicants further claim the repellant finish chemical includes chemicals that contain perfluorocarbon groups. Abe, while not incorporating by reference U.S. Patent No 3589906 to McDowell, references the patent as a preferred source of fluorinated surfactants. See col. 4, ll 4-13. McDowell teaches fluorine surfactants having fully fluorinated carbon groups (i.e., McDowell teaches fluorine surfactants with perfluorocarbon groups). See col. 1, ll 13-35 and specifically, l 22 and l 31). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the perfluorocarbon surfactants of McDowell as the fluorinated surfactants of Abe, since Abe discloses these as the preferred surfactants to be used in its ink-receiving layer, and one skilled in the art would expect these surfactants to improve the sharpness of images placed thereon, as taught by Abe on col. 3, ll 66-67.

13. Claims 23-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abe (US 5372884), as applied to claims 1-2, above. With regard to claims 23-28, applicants claim that the repellant finish chemical is present in various weight percents (e.g., 0.005 to 60 weight percent). Abe discloses its fluorine surfactant is present in an amount of from 0.1 to 7 dry weight percent. See col. 4, ll 13-16. Consequently, Abe discloses that its water repellant compound is present in an amount that overlaps

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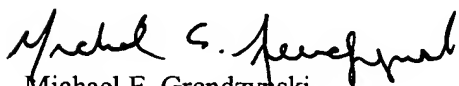
applicants' claimed amounts. In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990). See MPEP § 2144.05. Applicants can rebut a prima facie case of obviousness based on overlapping ranges by showing the criticality of the claimed range. *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir.1990); see also MPEP § 2144.05.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael E. Grendzynski whose telephone number is 703-305-0593. The examiner can normally be reached on weekdays, from 9:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 703-308-0449. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-5408 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2351.



Michael E. Grendzynski
Assistant Examiner
April 18, 2003